

REMARKS

Reexamination and reconsideration of this application is respectfully requested in light of the foregoing amendments to the specification and claims and the following remarks. It is respectfully requested that Applicant's request for request for continued examination be approved.

Claims 1-21 are pending in this application. Independent claims 1, 13 and 18 have been amended. No new matter has been added to the application. Support for the amendments can be found in Figs. 4-6 and 13 and in paragraph [0043] of the specification.

Applicant notes the Examiner's withdraw of the prior rejections under the second paragraph of 35 U.S.C. § 112 and under 35 U.S.C. §§ 102 and 103(a). Applicant further notes the Examiner's acknowledgment of Applicant's claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority document as well as the Examiner's acceptance of the formal drawings filed on August 26, 2003.

Objection to the Specification

The title has been objected to as not being descriptive of the invention. The title has been changed to "Driving Controller And Method For Driving Plural Driving Units And Image Sensing Apparatus." It is believed that this title describes the claimed invention. It is respectfully requested that the new title be approved and that the objection be withdrawn.

Objections to Claim 18

Claim 18 is objected to because (i) the claim includes a superfluous "detect whether the" and (ii) the claim was improperly amended in that in line 4, the phrase "detecting whether the" was not underlined and in line 7, the phrase "the driving member" was not underlined to show

additional subject matter. With respect to the objections to the phrase “detect whether the”, this phrase was not intended and was accidentally incorporated in the editing process. The phrase has been deleted thereby obviating the objection. As for the phrase “the driving member”, it is believed that the Examiner means that the phrase “detecting circuit detects the position of the” should have been underlined. In order to correct this matter, in claim 18 as presented herein, the entire phrase as been underlined. It is believed that by this the amendment, the objection is obviated.

Rejection Under 35 U.S.C. § 102

Claims 1-9, 12-16 and 18-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ishida et al. (U.S. Patent No. 6,639,625). Independent claims 1, 13 and 18 have been amended to recite that the when the detecting circuit detects the position of the driven member has not changed for a predetermined time, the controller circuit provides a driving signal to the driving unit. This feature is not disclosed by Ishida et al.

The Examiner finds that drive mechanisms **61** and **62** and the direction controller **63** comprise the detecting circuit to detect the position of the drive member (image sensing unit **10**). The direction controller **63** receives information on the number of rotations of motors in accordance with signals from the drive mechanisms through encoders **33**. There is no disclosure that the direction controller determines if the drive member has not changed position for a predetermined period of time, and if it has not changed position, sending a driving signal to the drive member, i.e., image sensing unit **10**.

The above described mechanism solves a problem which is not recognized by Ishida et al. The problem is that if the driving member and driven member are engaged for a long period of time, when the driving voltage is applied, the driven member may not move because the driving

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member may temporarily affix itself to the surface of the driven member, thus preventing the movement of the driven member when driving voltage is applied. Applicant's solution to the problem is to provide the controlling unit with the unique feature of recognizing that the position of the drive member has not changed over a period of time and automatically signal the drive member to change position so that when the drive voltage is applied, the driven member will move. Ishida et al. does not provide a solution to this problem. The Ishida detecting circuit is not designed to recognize that the position of the driven member has not moved over a predetermined period of time and to automatically send a drive signal to the drive units.

Accordingly, as amended, the independent claims, and therefore the claims dependent thereon, distinguish over Ishida et al. Therefore, claims 1-9, 12-16 and 18-20 under 35 U.S.C. § 102(e) would not be anticipated by Ishida et al. It is respectfully requested that the rejection be reconsidered and withdrawn.

Rejections Under 35 U.S.C. § 103

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida et al. (U.S. Patent No. 6,639,625) and Ackermann et al. (U.S. Published Application No. 2001/0017665). Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida et al. and Suzuki (U.S. Patent No. 6,269,580). Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida et al. and Emura (U.S. Patent No. 5,768,038). As noted *supra*, independent claims 1, 13 and 18 have been amended to more clearly define the function of the detection circuit as detect whether the position of the drive member is or is not changed over a predetermined time, and that if the position has not changed, the control circuit sends a drive signal to activate the driving unit. Ishida et al. do not disclose or suggest this feature of the

invention for the reasons stated *supra*, which are incorporated herein by reference. The Ackermann et al., Suzuki and Emura references do not make up for the deficiencies of Ishida et al.

Ackermann et al. discloses piezoelectric motors, but do not disclose or suggest using a detection circuit to detect whether the position of the driven member has or has not changed, let alone providing for a control circuit that sends a driving signal after a predetermined period of time to drive the drive member.

Suzuki is directed to a motor-driven focusing apparatus which includes a processing/control circuit 23 for controlling a single driven member. This circuit controls the focus state detecting system 20 and the focusing lens group driving system 30 to detect the focus state of the object image formed on a reference focal plane. While Suzuki teaches that the initial position of the focusing group is saved in RAM 24 after the start switch 27 is depressed and that a second position is again stored in RAM 24 if switch 27 is depressed again within 0.5 to 1 seconds (col. 6, lines 34-47), the focus state detecting system does not determine if the driven member is or has changed at a predetermined time. Even if it did, the reference does not disclose that the control circuit sends a driving signal to the driving unit after a predetermined period of time. Moreover, the data stored in RAM is erased if switch 27 is not pressed within 0.5 to 1 seconds (col. 6, lines 48-51). Thus, if the data is erased, the reference does not disclose or suggest that the focus state detecting system would be capable of determining whether the position of the drive member has or has not changed at a predetermined time as required that the amended independent claims. Also, Suzuki discloses controlling a single driven member as opposed to the claimed invention which requires controlling multiple driving members, and it

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does not suggest or disclose that multiple driven members can be controlled to detect the position of each driven member and determine that the positions of the members has or has not changed.

As for Emura, the invention disclosed in this reference is directed to a device employing piezoelectric vibrators. There is no disclosure or suggestion in Emura of using a detection control circuit to control drive members as set forth in the present claims as amended.

For all of the foregoing reasons, it is respectfully requested that the rejections of claims 10, 11 and 17 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

New Claim 21

New claim 21 has been added that is similar to claim 1, but functionally recites that when the driving member and the driven member engaged by friction and adhere to each other, after a predetermined period of time the control circuit drives the driving unit to release the driving member from the driven member. For all of the reasons set forth *supra*, Ishida et al., Ackermann et al., Suzuki and Emura, taken alone or in combination, do not disclose or suggest the claimed subject matter.

Conclusion

For the foregoing reasons, it is submitted that the claims 1-21 as amended are patentable over the teachings of the prior art relied upon by the Examiner. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.

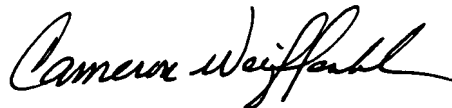
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If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. § 1.17 and due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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